

EXHIBIT 64
REDACTED

Message

From: [REDACTED]@google.com]
Sent: 10/9/2013 6:10:58 PM
To: [REDACTED]@google.com
CC: [REDACTED]@google.com; [REDACTED]@google.com; [REDACTED]
Subject: Re: [REDACTED]'s auction

Hi all,
I copied everything [here](#), let's move the discussion to that document. Thanks!

[REDACTED]

On Wed, Oct 9, 2013 at 11:04 AM, [REDACTED]@google.com> wrote:

On Wed, Oct 9, 2013 at 9:31 AM, [REDACTED]r@google.com> wrote:
Hi [REDACTED]

The DSP is also delivering value (to the advertiser), so why is their margin a tax ? An efficiency loss ? If they earned a profit/utility of [REDACTED] (instead of the advertiser), why is there an efficiency loss ? Perhaps, the DSP can better allocate this [REDACTED] (like in inventing a self driving car :)) which will create better long term value.

Maximizing efficiency maximizes the buyers utility, whereas maximizing revenue maximizes the sellers utility.

Efficiency is defined as how the buyer(s) value the query, but it's actually the total value of the auction. Suppose an advertiser values an impression at \$3 CPM, and we charge them \$1. Then because of that payment, they actually realize a profit of \$3 - \$1 = \$2, and the value to the seller (and Google) is \$1. We think efficiency is important because it represents the total size of the pie.

Why should one be better than the other ? Are there any auction theoretic results to this effect.

In the case of Google.com or [REDACTED] where there is a lot of demand (un-aggregated), efficiency and revenue maximization are probably equivalent in practice. But in the case of small/medium publishers who have to sell to middle-men (DSP), it is not clear why maximizing efficiency is the better approach. The exchanges target these kinds of pubs.

On Wed, Oct 9, 2013 at 1:06 AM, [REDACTED]@google.com> wrote:

Hey [REDACTED]

<timeout>

You mentioned that you had a 'holdback' of folks who you wouldn't apply Bernanke to... I think it was a holdback of publishers, right?

Are you planning on doing the same for advertisers? That may be interesting from our POV, I think.
</timeout>

I'm not yet subscribed to the theory that we should be as [REDACTED]

Term	Percentage (%)
Green energy	98
Green economy	85
Carbon footprint	95
Sustainable development	92
Renewable energy	90
Eco-friendly	88
Green technology	82
Clean energy	80
Green products	78
Green space	75
Green building	72
Green infrastructure	68
Green transportation	65
Green agriculture	62
Green waste management	58
Green economy	55
Green energy	52
Green economy	50
Green energy	48
Green economy	45
Green energy	42
Green economy	40
Green energy	38
Green economy	35
Green energy	32
Green economy	30
Green energy	28
Green economy	25
Green energy	22
Green economy	20
Green energy	18
Green economy	15
Green energy	12
Green economy	10
Green energy	8
Green economy	5
Green energy	3
Green economy	1
Green energy	0

On Wed, Oct 9, 2013 at 12:28 AM, [REDACTED]@google.com> wrote:

On Wed, Oct 9, 2013 at 12:06 AM, [REDACTED] <[REDACTED]@google.com> wrote:

Interesting!

Here's how I'm thinking through this...

First, they appear to be delivering so much value to advertisers through better targeting (affecting allocations, and improving efficiency), that they can extract this [REDACTED] in addition to the exchange's [REDACTED]

If we do not submit our second bid to AdEx (like what they do) then GDN number will be █ in addition to the exchange's █

Now, how is this extra value (efficiency) allocated? Well, the advertiser gets a lot of it, and they keep the rest (very little goes to the publisher). Since they don't give a crap about the publisher this makes sense.

What would happen if, instead of keeping the [redacted], they charged less... and bought even more impressions/clicks/conversions for their advertiser? In other words, their high margins are preventing some additional transactions from occurring where their advertiser values them higher than anyone else does. That's an efficiency loss.

There we go, so now you are arguing for DRS and Bernanke!

They're almost surely net efficiency positive (because they improve allocations so much), but they're not providing as much efficiency *as they could be* because of their margins.

Which again, is obviously of no consequence to them. :)

Group	Percentage
All people	85%
People of color	75%
LGBTQ+ people	65%
Muslims	60%

Agreed! Good suggestion for [REDACTED]. My cost center tells me that I work for a DSP named GDN that is owned by Google. I want to compete as hard as possible for each impression. Transact more, get more money, generate more value for advertisers that are working with my network and do not care about value of advertisers that I am winning queries from them! They should come to my network and then I try as hard as possible for them. But as long as they write their check to my former boss I do not care about them I want to keep my current boss happy :-)

If the exchange picks any other strategy than maximizing efficiency, then once competitive it won't be able to charge as high a price because there isn't as much total value being created on that exchange.

[REDACTED]

On Oct 8, 2013 11:14 PM, [REDACTED]@google.com> wrote:

FYI, the filing for [REDACTED] IPO showed a margin (revenue - traffic acquisition costs) of around [REDACTED] and they are still beating GDN for winning most of the huge retail dynamic remarketing customers.

[REDACTED]

[REDACTED]

On Tue, Oct 8, 2013 at 11:06 PM, [REDACTED]@google.com> wrote:

Does that mean lowering margin is acceptable but raising is not? How can that be the case when [REDACTED] was chosen arbitrarily?

On Tue, Oct 8, 2013 at 11:05 PM, [REDACTED]@google.com> wrote:

[REDACTED]
For the record, I think the differences between margin on AdX vs GDN is a legitimate issue you guys are addressing. I just think it's a bit more indirect w/ [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]
Efficiency is the value the winning advertiser had for all queries... even if that quantity is not measurable by us.

[REDACTED]
On Oct 8, 2013 10:52 PM, [REDACTED]@google.com> wrote:

(BTW, I brought up the CPU and "difficulty" just as an example, but there could be many reasons for wanting higher/lower margin on a class of advertiser)

[REDACTED]
On Tue, Oct 8, 2013 at 10:50 PM, [REDACTED]@google.com> wrote: